

AMENDMENTS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Currently amended) A [[The]] four-stroke engine of claim 1, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to lubricate non-crankcase-environment engine components, wherein the means for vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase;
wherein the means for vibrating the crankcase includes the crankcase having a wall thickness of about 1.5 mm.
3. (Currently amended) A [[The]] four-stroke engine of claim 1, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to lubricate non-crankcase-environment engine components, wherein the means for vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase;
wherein the means for vibrating the crankcase includes the crankcase having a wall thickness of less than 1.5 mm.

4. (Previously cancelled)
5. (Currently amended) A ~~[[The]]~~ four-stroke engine of ~~claim 4~~, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to
lubricate non-crankcase-environment engine components, wherein the means for
vibrating the crankcase includes a vibration mechanism coupled to a portion of
the crankcase;
wherein the vibration mechanism is a vibration plate.
6. (Currently amended) A ~~[[The]]~~ four-stroke engine of ~~claim 4~~, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to
lubricate non-crankcase-environment engine components, wherein the means for
vibrating the crankcase includes a vibration mechanism coupled to a portion of
the crankcase;
wherein the vibration mechanism is a vibration spring.
7. (Currently amended) A ~~[[The]]~~ four-stroke engine of ~~claim 4~~, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to
lubricate non-crankcase-environment engine components, wherein the means for

vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase;

wherein the vibration mechanism is coupled to a bottom portion of the crankcase.

8. (Currently amended) A [[The]] four-stroke engine of ~~claim 4~~, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to lubricate non-crankcase-environment engine components, wherein the means for vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase;

wherein a clearance area located in the crankcase is less than 10 mm.

9. (Currently amended) A [[The]] four-stroke engine of ~~claim 4~~, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to lubricate non-crankcase-environment engine components, wherein the means for vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase;

wherein a clearance area located in the crankcase is about 1.5 mm.

10. (Currently amended) A [[The]] four-stroke engine of ~~claim 4~~, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and

means for vibrating the crankcase to mist oil from the oil reservoir to lubricate non-crankcase-environment engine components, wherein the means for vibrating the crankcase includes a vibration mechanism coupled to a portion of the crankcase;

wherein a clearance area located in the crankcase facilitates splashing of the oil against a counterweight.

11. (Previously presented) A four-stroke engine comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and

means for misting oil from the oil reservoir without the use of an oil dipper, wherein the means for misting oil includes providing a clearance area in the crankcase which is less than 10 mm such that a surface ripple in the oil reservoir splashes against a counterweight in the engine, the clearance area being maintained during a complete rotation of the crankshaft above an at-rest oil level.

12. (Previously cancelled)

13. (Previously cancelled)

14. (Previously presented) The four-stroke engine of claim 11, wherein the clearance area is about 1.5 mm.

15. (Original) The four-stroke engine of claim 11, wherein the means for misting oil from the oil reservoir includes utilizing engine vibration to produce a ripple in a surface of the oil.

16. (Original) The four-stroke engine of claim 15, further comprising a vibration mechanism coupled to the crankcase to amplify the ripple.

17-19. (Previously cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Currently amended) A [[The]] four-stroke engine of claim 4, comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase; and
means for vibrating the crankcase to mist oil from the oil reservoir to
lubricate non-crankcase-environment engine components, wherein the means for
vibrating the crankcase includes a vibration mechanism coupled to a portion of
the crankcase;

wherein the means for vibrating is coupled to an exterior portion of the crankcase.

27. (Previously presented) A four-stroke engine comprising:
a crankcase;
a crankshaft supported for rotation within the crankcase;
an oil reservoir located within the crankcase;

means for misting oil from the oil reservoir without the use of an oil dipper, wherein the means for misting oil includes providing a clearance area in the crankcase which is less than 10 mm such that a surface ripple in the oil reservoir splashes against a counterweight in the engine, and wherein the means for misting oil from the oil reservoir includes utilizing engine vibration to produce a ripple in a surface of the oil; and

a vibration mechanism coupled to the crankcase to amplify the ripple.